1160

Abstract

A method for the detection and analysis of patterns receives an image containing object labels and performs relational feature development using the input image to create at least one pattern map. It then performs relational feature analysis using the at least one pattern map to create a relational feature analysis result. The pattern detection and analysis method further comprises a recipe for automation control and includes determination of a genetic anomaly.

1170

1165

A relational feature development method receives an image containing object labels and performs core measurement table development using the input image to create at least one core measurement table. It then performs feature table production using the at least one core measurement table to create at least one feature table. It also performs PatternMap creation using the at least one feature table to create a PatternMap. The relational feature development method further comprises a PatternMap integration and update step to create an updated PatternMap.

1175

1180

A boundary distance measurement receives an image containing object labels and performs structure object mask production using the input image to create structure object mask. It then performs inner distance transform using the structure object mask to create inner distance transform image and finds individual object centroid using the input image to create individual object centroid output. In addition, it finds object boundary distance using the individual object centroid and the inner distance transform image to create object boundary distance output.